



THE SCHOOL OF PUBLIC POLICY

MASTER OF PUBLIC POLICY

CAPSTONE PROJECT

Rethink the Drink:
Decreasing alcohol consumption through education and informed decision making

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LIST OF ABBREVIATIONS

ABV- Alcohol by Volume

AUD- Alcohol Use Disorder

FDR- Food and Drug Regulations

FIC- Food Information to Consumers

MADD- Mothers Against Drunk Driving

TBB- The Alcohol and Tobacco Tax and Trade Bureau

TVPA- Tobacco and Vaping Products Act

WGC- Wine Growers Canada

WHO- World Health Organization

EXECUTIVE SUMMARY

Excessive alcohol consumption is an ongoing societal and public health concern in Canada and globally. It is apparent that there is a lack of knowledge regarding the detrimental health consequences, and the social and financial impacts alcohol misuse can cause or contribute to. Furthermore, the COVID-19 pandemic resulted in increasing alcohol sales and consumption, proving it to be the optimal time for the Canadian Government to act and advocate for the health of Canadians. Throughout our history, there have been many notable attempts to reduce alcohol consumption from methods such as temperance movements to prohibition, to educational campaigns and organizations dedicated to alcohol awareness, taxation, and purchasing age requirements. Certain efforts to decrease alcohol consumption have fallen short and some have shown promise, but it is clear that Canada still has the potential to implement effective policy change to mitigate the associated risks of alcohol misuse, and provide Canadians with the opportunity to make informed health decisions. Through research conducted for this report, one of the most promising and currently underutilized policy options to address this issue is altering labels on consumable alcohol to include health information. Health information can be presented and conveyed through labelling in various ways such as health warning statements, pictograms/images, nutrition facts, or general drinking guidelines. Amending the labelling requirements for alcohol would be a valuable addition to the existing policies in Canada, and would likely decrease alcohol consumption.

This report employs a documentary analysis approach to characterize the policy problem and its history, before identifying suitable and effective policy options. In the following order, this report will explore the policy history surrounding the regulation of alcohol consumption and previous attempts at decreasing consumption; review our current laws and regulations regarding

alcohol product labelling drawing comparisons to other cognate jurisdictions; and finally, examine Canadian laws and regulations of tobacco products as a comparator. Previous policy initiatives ranging from the status quo, to taxation, to educational campaigns and labelling will be explored, with the most promising option to be assessed using criteria such as cost, acceptance, effectiveness and feasibility. Finally, based on evidence-informed research, policy recommendations will be made that are the most likely to decrease alcohol consumption in the country and increase the overall health and well-being of Canadians.

INTRODUCTION

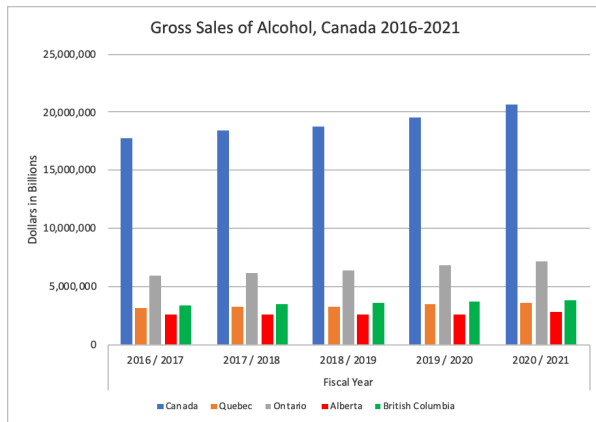
Alcohol is one of the most used substances in Canada being consumed by roughly 80% of the population (Canada 2020a). Often used in social settings, alcohol is overlooked as a health hazard, instead being viewed simply as a ‘feel-good’, celebrated, endorsed and supported substance that is highly marketed and readily available. Of alcohol consumers, 15% of individuals are consuming amounts greater than those recommended by the Canada’s Low Risk Drinking Guidelines (Canadian Centre on Substance Use and Addiction 2019). Unbeknownst to the majority of individuals, alcohol is considered a group 1 carcinogen, and excessive alcohol use can cause an array of health consequences including stroke, heart attack, cancers, psychiatric diseases, and liver disease. Societal consequences of drinking can include violence, motor vehicle accidents, unemployment, absenteeism and crime, family disruption, risky sexual behavior, intoxication, withdrawal syndromes, and fetal alcohol syndrome (World Health Organization 2022a).

Besides the numerous health implications, there are also financial costs associated with excessive alcohol use. Alcohol consumption costs Canadian society roughly \$15 billion a year; with 40% of that figure attributed to economic loss of production costs at \$5.9 billion, followed by 29% of costs incurred by the health care system at \$4.2 billion, criminal justice outlays of 22% at \$3.2 billion, and 9% being other direct costs at \$1.34 billion (Canada 2020b).

Given the statistics, it is evident that excessive alcohol use is a detriment to Canadians not only on an individual level, but on a societal level as well. Unfortunately, this issue has only been amplified by the COVID-19 pandemic. According to a study led by Dr. Abdel-Aziz Shaheen, MD, assistant professor at the University of Calgary Cumming School of Medicine; from March to September 2020, liver disease hospitalizations for alcoholic hepatitis –which is caused by

excessive drinking – rose by 90.5% in Alberta during the first wave of the COVID-19 pandemic. These cases nearly doubled from 11.6/10,000 admissions pre-covid, to 22.1/10,000 admissions during the pandemic. Additionally, the average age for patients admitted for alcoholic hepatitis lowered to 43 from 48 years of age pre-pandemic (Cumming School of Medicine 2021).

Not surprisingly, the increase in alcohol-related hospitalizations coincided with an increase in liquor sales. With data pulled from Statistics Canada, figure 1 below shows the gross sales of alcohol in Canada and its four largest provinces from 2016-2021. The gross sales of alcoholic beverages sold in Canada in the fiscal year ending on March 31, 2021 was \$20.5 billion, which is up approximately 5% from the previous fiscal year. As per Statistics Canada, this was the largest sales increase in over a decade. Most of the liquor authorities attributed this growth in sales to the pandemic (Statistics Canada 2022).



(Statistics Canada Table 10-10-0012-01)

Out of the included provinces, Ontario and Alberta alcohol sales increased the most in 2021, both up roughly 6% from the previous fiscal year. Quebec sales increased by 3% in 2021 from the previous year, and BC increased by almost 3%. Statistics Canada differentiates a number of psychosocial causes for the increase, with individuals reporting increased alcohol sales and consumption due to boredom at 60%, stress at 58%, and convenience at 53%. Loneliness and

insomnia were also mentioned as reasons at 37% and 17%. As COVID-19 and the consequences of the pandemic persist, it is a priority to tackle the increase in alcohol consumption for the sake of Canadians and the health care system.

In Canada, alcohol is not subject to rigorous labelling requirements, and alcoholic beverages do not contain health warnings or any health-related information of the product. The lack of information leaves consumers without basic product information about the potential health risks of alcohol consumption. Additionally, this insufficient information limits the consumers' ability to make informed decisions about their liquor intake. Evidently, there is a need to explore options to address this health issue, leading to a more informed consumer, with the goal of decreasing the overall alcohol consumption in Canada. One of the most promising policy recommendations in the current policy mix is to change the labelling requirements for alcohol products in Canada, more specifically, altering legislation to ensure that labels utilize the most effective mix of health information, health warnings, and general drinking guidelines. Four options within labelling to consider include: information on Canada's Low Drinking Guidelines/standard drink information; health warnings for cancer, stroke, liver disease and fetal alcohol syndrome; graphic images/pictograms, and nutrition facts. The intent of this report is to examine whether changes to legislation regarding labelling requirements for alcohol products is a viable and effective policy recommendation to add to existing measures, as well as presenting labelling options for the most effective outcome.

The structure of this report is as follows: in the next section, further background information will be provided on historical policy attempts to reduce alcohol consumption. This will be followed by a comparative examination of cognate jurisdictions on their current legislation regarding alcohol and labelling, including Canadian legislation. Following that, the

report will examine Canadian laws and regulations of tobacco products as a comparator, discussing the specifics, effectiveness, and possible translation of tobacco labelling policy to alcohol products. The policy options will be evaluated against specific criteria such as cost, acceptance, effectiveness and feasibility. Lastly, final recommendations and a conclusion will be made.

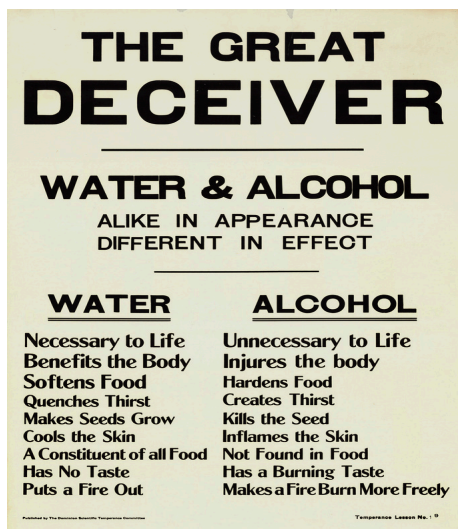
BACKGROUND

Alcohol has been an integral part of Canadian culture since Europe's first contact with indigenous communities and colonization. This said, current Canadian alcohol policies are vastly different to what once prevailed. Presently, alcohol is a widely produced and consumed product, highly socialized, promoted, and readily available. Rewind to a much younger Canada, and you find a different attitude and culture. At the level of similarity, throughout the 19th century, alcohol consumption was prodigious and remained that way for approximately the next 100 years, as our production of grains, wheat and rye produced a surplus for the fermentation and creation of alcohol (Belshaw 2016).

Temperance and Prohibition

In response to this prodigious production and consumption, the temperance and prohibition movements were born. The earliest attempts to 'temper' or reduce alcohol consumption in British colonial Canada in the 1830's-1840's, when a small individualistic movement came forth that sought to champion individual will power as the solution to consumption (Belshaw 2016). Buttressed by the rise of evangelical Christianity, the temperance movement, also found allies in the emerging maternal feminists, and bourgeois concerns about working class behavior (Belshaw 2016). For Christianity, the desire for temperance was based on the belief that alcohol consumption is a sin. The maternal feminists support of temperance was

based on their fight for improved women’s rights and privileges, which was founded on the strength of women’s reproductive power. In this context, women who drank excessively were jeopardizing themselves, their embryos, and the health of the nation. From the maternal feminists’ perspective, Canadian men who drank excessively were undesirable to wed and mate with. Finally, the Canadian bourgeoisie supported the temperance movement as liquor consumption and drunkenness, particularly as practiced by their working-class inferiors, was viewed as a threat to both civility and productivity (Belshaw 2016). A pre-First World War poster promoting temperance can be seen below in Figure 2.



(Belshaw 2016).

With this growing mindset stemming from multiple groups, in 1878 the Canadian federal government passed the *Canada Temperance Act*, legislation which gave local governments the option to ban the sales of alcohol. Efforts of the temperance movement reached their peak in 1914 at the onset of the First World War, at which time drinking came to be seen as an antipatriotic offence to those sacrificing their lives abroad. Additionally, there were again concerns about productivity in Canada during the war (Belshaw 2016). So once again, province-

wide referenda were organized, and what is widely known as prohibition arrived by 1917. Total eradication of liquor was implemented in every province except Quebec.

Prohibition did not last long, as returning soldiers from the war were not happy with a ‘dry’ country, and felt that they earned the right to drink following fighting for their country.

Following this widespread attitude change, British Columbia joined Quebec in abandoning prohibition in 1921 followed soon after by the Yukon, Alberta and Saskatchewan.

Status Quo

Following the end of prohibition, legal alcohol production, distribution and sales increased as production and delivery efficiencies were achieved, developing the large and successful alcohol market that exists today. Currently alcohol laws fall under the responsibility of both the federal and provincial governments. The federal government develops and enforces overarching laws, policies and regulations for alcoholic beverages that govern areas such as labelling and packaging requirements, compositional standards, geographical indications, and duty/taxation rates (Canadian Free Trade Agreement n.d.). The provinces are responsible for setting the legal age to purchase, consume or supply alcohol, as well as licensing to sell or supply liquor. Additionally, each province has its own set of rules and regulations enforced by government-controlled liquor boards that oversee and govern the overall manufacture, importation, storage, distribution, possession, sale, and consumption of liquor in the province (Canadian Free Trade Agreement n.d.). Currently, the legal drinking age is 19 across Canada excluding Alberta, Manitoba and Quebec where the legal drinking age is 18.

Taxation

Compared to other jurisdictions, Canada is one of the most expensive countries to purchase alcohol which can mainly be attributed to the duties and taxes imposed on liquor.

Alcohol taxation rates are established and set by both the federal and provincial governments. The Excise Act S.C. 2002, c. 22 is federal legislation that regulates the taxation of spirits, wine and tobacco products. Provincially, alcohol sales tax is imposed on the products, with each province establishing their own rates governed by their rules and regulations. Excise and sales taxes represent the most widespread public policy initiative to reduce alcohol consumption by increasing the retail price of alcohol, with approximately 80% of the cost of liquor being attributed to taxes (Canada Buzz 2021). The primary consideration behind liquor tax is health promotion, as a higher price of the good may deter consumers from purchasing alcohol. Although some economists may argue that the demand for alcohol is inelastic, the WHO has found that when other factors remain unchanged, an increase in alcohol prices usually leads to a decrease in consumption, while a decrease in price results in an increase of alcohol consumption (Osterberg n.d.). This goes back to the basic economic theory that quantity demanded of a good is inversely related to its price. The WHO also states that alcohol elasticity values also vary between countries, and between the different kinds of alcohol being consumed. The addictive nature of alcohol implies that the short-term price elasticity of alcoholic beverages is smaller in absolute value than the long-term price elasticity (Osterberg n.d.). Studies have shown that higher alcohol prices were associated with an overall lower prevalence of current drinking and binge drinking, with a lower frequency of binge drinking (Elder et al 2010). While taxation is a progressive and effective policy to deter consumers, it seems like it is still not enough to motivate significant reductions in alcohol intake. Individuals with alcohol addiction or those purchasing for social reasons continue to buy and consume alcohol regardless of the price.

Education

Education on the effects of alcohol is another policy initiative that has been utilized to decrease alcohol consumption. Modern initiatives promoting alcohol safety or responsibility include advertisements or service announcements that are conveyed to the public through television, radio, or print media. These messages are either produced by government agencies, community action groups, or are industry-sponsored. Current Canadian advocates in this policy area include Mothers Against Drunk Driving (MADD), a volunteer-driven group that advocates for public awareness and education on the dangers of drinking and driving. While the primary focus is on impaired driving, MADD's campaigns could also deter individuals from consuming alcohol in the first place, once the possible consequences are realized. Other organizations in Canada that are involved in this policy space include Alcoholics Anonymous, a program for recovering alcoholics focusing on alcohol abstinence and sobriety, as well as Al-Anon, an organization that focuses on helping individuals recover from the effects of someone else's drinking. The Public Health Agency of Canada (2016) also provides information on the consequences of alcohol misuse, and provides resources for third parties to plan programs aimed at preventing and reducing alcohol misuse by raising awareness about its harmful effects. Organizations that the Public Health Agency of Canada have partnered with include Drug Free Kids Canada, Canadian Students for Sensible Drug Policy and Postsecondary Education Partnership-Alcohol Harms, and the Canadian Centre on Substance Use and Addiction. These partnerships aim to spread awareness to youth and young adults specifically about the effects of drinking. Examples can be seen in the informational posters of Figure 3, 4 and 5. While all of the aforementioned organizations do not address the health consequences of alcohol specifically,

they still promote alcohol safety and education on the other implications of drinking, which may cause the consumer to think twice about drinking and/or decrease their alcohol consumption.

Be ready to say “no thanks”

Planning comfortable ways to deal with pressure can help you stay on track. Some reasons you could use include:

- “No thanks, I’m driving.”
- “No thanks, I just finished one.”
- “No thanks, I’d like to wait a few minutes.”
- “I’m good, thanks.”
- “I’m taking a break this month.”
- “I have an exam tomorrow and want to be clear-headed.”
- “I have a big game tomorrow and want to be in shape.”

Think of what you can say if you are offered a drink.

Canadian Centre on Substance Use and Addiction | PEP – AH Postsecondary Education Partnership Alcohol Harms | www.pepah.ca

Let's count your drinks

It's easy to measure your alcohol use by counting “standard” drinks. A “standard” drink has 13.6 grams of alcohol, regardless of the kind of drink you're having.

Each of these drinks has the same amount of alcohol and each is one standard drink.

- 43 ml 40% 13.6 g alcohol
- 142 ml 12% 13.6 g alcohol
- 341 ml 5% 13.6 g alcohol
- 43 ml 40% 13.6 g alcohol
- 341 ml 5% 13.6 g alcohol
- 142 ml 12% 13.6 g alcohol
- 96 ml 20% 13.6 g alcohol
- 341 ml 5% 13.6 g alcohol

Canadian Centre on Substance Use and Addiction | PEP – AH Postsecondary Education Partnership Alcohol Harms | www.pepah.ca

(Postsecondary Education Partnership-Alcohol Harms n.d.)

DON'T WANT TO DRINK?

You're not the only one! 1/4 of students haven't had a drink in the past month, and 1/6 haven't had a drink in the past year.

Let your friends know ahead of time! If you don't want to drink—that way, you'll feel less pressured even if others are drinking.

Don't forget that non-alcoholic drinks are also available! Most of the time if you're with people who are drinking.

DRINKING IS UP TO YOU

WANT TO REDUCE POSSIBLE RISKS?

Alcohol isn't for everyone! Be mindful of the ways you could be making someone feel pressured to drink or to drink more than they would like.

Drink water between each drink to stay hydrated—you'll thank yourself in the morning!

If you're planning on using another drug, avoid trying it when you've been drinking. Aside from potentially harmful interactions, it could ruin the experience for you.

Be careful about mixing alcohol with other drugs since they can interact in unpredictable ways, including:

- Weed & Alcohol** Dizziness, nausea
- Prescription Meds & Alcohol** Nausea, blocking out
- Other Drugs & Alcohol** Various unintended effects

Look up interactions before mixing.

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(Canada 2021a)

Through assessment of the history of alcohol in Canada and the various policies trialed and practiced, it is apparent that we are still in need of another policy option to address the health issue and tackle alcohol consumption in a direct, impactful way. Through exploration of the policy space, labelling seems to be a promising and pivotal addition to the status quo and current Canadian policy regime. Altering alcohol labelling requirements and the options within labelling will be examined and discussed further for the remaining portion of this report.

CANADIAN AND COGNATE JURISDICTION LAWS AND REGULATIONS

The World Health Organization (WHO) recommends that health warning labels should be implemented on alcohol products to raise consumer awareness about the negative consequences of alcohol consumption (World Health Organization 2021). Currently, more than 47 countries have policies that require alcohol warning labels. Most of these mandated labels include vague statements of risk or caution about the most common risks of drinking such as alcohol during pregnancy, or when operating a motor vehicle (Hobin et al 2020b). This section will explore the current labelling policies of Canada and similar jurisdictions such as Australia, New Zealand, the United Kingdom and the United States.

Canada

In Canada, alcohol beverage products are subject to labelling requirements under the Food and Drug Regulations C.R.C., c. 870 (FDR). The FDR is responsible for outlining the standards of production, distribution, sale, labelling and many other responsibilities applied to food, drink and drugs. ‘Health Claims’ fall under section B.01.600 of the regulation which includes examples of health claims for food and drink. Although many examples of food and beverage health claims are stated, the FDR fails to include health claims regarding alcohol, with the only alcohol-related statement being “contains 0.5% or less alcohol” (Food and Drug Regulations). Division 2 of the FDR goes into more detail on alcoholic beverages specifically, but again fails to mention labelling that includes options such as health warnings, information on Canada’s Low Risk Drinking Guidelines, nutrition facts, or pictograms/images, which are established to help Canadians make informed decisions about their drinking. According to the guidelines, a standard drink contains 13.45 grams of pure alcohol, and it advises women to limit alcohol intake to 2 standard drinks per day and 10 per week, and men to limit themselves to 3

standard drinks a day and 15 per week (Canada 2021b). Even nutritional facts are not required as beverages with alcohol content of more than 0.5% are exempt from carrying a nutrition facts table according to section B.01.401 of the regulation (Food and Drug Regulations). According to the FDR, the only health-related labelling required for food and alcohol products is when there are added allergens, gluten sources and sulphites at levels of 10 parts per million or higher, which must be declared on labels as per section B.01.010.1 (Food and Drug Regulations).

Australia and New Zealand

The lack in regulation and policy regarding this issue is not unique to Canada, as there are currently no international standards for alcohol labelling. While evaluating whether health warning labels could be implemented in Canada, it is wise to compare and contrast to other similar countries. In Australia and New Zealand, a common Food Standards Code is responsible for outlining alcohol beverage labelling requirements. As per section 2.7.1, alcohol labels do not require a nutrition information panel and all alcoholic beverage products that contain more than 1.15% alcohol by volume (ABV) are not permitted to make health claims (Australia New Zealand Food Standards Code 2022). However, labels are required to include a pregnancy warning label in the form of a pictogram or a pictogram with words when the beverage contains more than 1.15% ABV (Australia New Zealand Food Standards Code 2022). Additionally, when products contain more than 0.5% ABV, labels are required to state the number of standard drinks they contain, which in Australia and New Zealand a standard drink contains 10 grams of pure alcohol (Australia New Zealand Food Standards Code 2022). In the 2020/2021 annual health survey conducted by the New Zealand Ministry of Health, one out of five adults or approximately 824,000 citizens are reported to have a ‘hazardous drinking pattern’ (Manatū Hauora Ministry of Health 2021). The Australian Bureau of Statistics (2022) reports that 1 in 4

individuals over the age of 18 exceeded the Australian Adult Alcohol Guideline in the 2020/2021 fiscal year, with people 18 years and older born in Australia being twice as likely (30%) as those born overseas to exceed the guideline (17%).

United Kingdom

The United Kingdom follows regulations set out by the UK government and the European Union's Food Information to Consumers (FIC). While individual EU countries may require additional labelling requirements, the UK has only implemented the FIC requirement which states that alcohol beverage labels are only required to include the strength by volume if the beverage contains over 1.2% ABV (Positive ID Labels n.d.). While not specified on their labels, the UK was one of the first countries to introduce the idea of counting alcohol units in 1987 to help people track the amount of alcohol they are consuming. One unit equals 8 grams of pure alcohol, with their guidelines stating that men and women are not advised to drink more than 14 units a week on a regular basis (The National Health Service 2021). The National Health Service website includes an alcohol unit calculator to determine a drink's alcohol content using the stated ABV on the label. It would be useful if the alcohol unit information was actually on the labels like in Australia and New Zealand, as it seems unlikely people will be utilizing a drink unit calculator when consuming alcohol, especially in social settings. The lack of health information and informative labelling in general is concerning as the European region has the highest proportion of drinkers and the highest intake of alcohol in the world (World Health Organization Europe 2022).

United States

The United States was the first country to introduce health warning labels on their alcohol beverage products in 1989. Their labelling is required to state: "Government Warning: (1) In

accordance to the Surgeon General, women should not drink alcoholic beverages during pregnancy because of the risk of birth defects. (2) Consumption of alcoholic beverages impairs your ability to drive a car or operate machinery and may cause health problems” (Alcohol and Tobacco Tax and Trade Bureau 2022). This is regulated and enforced by the Alcohol and Tobacco Tax and Trade Bureau on products that contain more than 0.5% alcohol. While not required on their labels, a standard drink in the US is one that contains 14 grams of pure alcohol (National Institute on Alcohol Abuse and Alcoholism 2022b). Labelling is just as important in the US as 14.5 million Americans aged 12 and older have alcohol use disorder (AUD), and less than 10% of those individuals receive treatment for their AUD (National Institute on Alcohol Abuse and Alcoholism 2022a).

Albeit vague and generally non-descript, the United States TBB has the most rigorous labelling requirements compared to the aforementioned jurisdictions including Canada. While the United States does have some form of rigorous labelling requirements and still has a high prevalence of alcohol misuse, this may beg the question of what is the point of pursuing labelling requirements in Canada? It appears that current labelling regimes in these jurisdictions are not currently effective, and have not been designed with decreasing alcohol consumption as the primary consideration. There is potential to take what is already out there, refine and add to it, and determine the most effective mix of health information to communicate to consumers. Once again, potential options within labelling include health warning statements for implications such as cancer, stroke, liver disease and fetal alcohol syndrome; information on standard drinks or Canada’s Low Drinking Guidelines; nutrition facts, or graphic images/pictograms. Perhaps the problem is that jurisdictions are not pursuing the right labelling, and a specific combination may be more successful. The subsequent section examines an adjacent policy area of tobacco

labelling, where the utilized labelling options are explored and discussed. Furthermore, there are also psychological factors to consider which demonstrate the efficacy of labels and how they subconsciously impact the consumer. These factors will be discussed below in the analysis section.

While this comparison shows that Canada is on par with other cognate countries regarding alcohol labelling, it also demonstrates that there is an opportunity for Canada to become a leader in health promotion and labelling policy, which could inspire these other nations to follow suit.

CANADIAN LAWS AND REGULATIONS OF TOBACCO PRODUCTS

It is apparent that Canada has the capacity to introduce health warning labels on alcoholic beverage products, as there are existing rigorous health labelling requirements applied to other regulated psychoactive substances such as tobacco and cannabis. For example, cigarette packaging is regulated by the Tobacco and Vaping Products Act S.C. 1997, c. 13 (TVPA), which outlines the guidelines and mandate for health warnings and toxic emission statements. Health Canada has approved 16 different health warning labels that cigarette packaging can utilize, which is mandatory to cover at least 75% of the package. Additionally, Canada was the first country to implement pictorial health warnings along with the written statements in 2000 (Tobacco Labelling Resource Centre, n.d.).

Effectiveness of Tobacco Labelling

There has been a notable reduction in smoking in Canada in the last three decades. The most recent data shows that overall prevalence of smoking was 15% in 2017, which is approximately 4.6 million Canadians (University of Waterloo 2019). This is significantly reduced from 1999 when overall smoking prevalence was at 25% (University of Waterloo 2019).

Since the introduction of pictorial health warning labels on cigarette packaging in 2000, the overall smoking trend was an average decrease in smoking prevalence of 3.2% of the previous year's value (Canada 2021c). Cigarette sales have also decreased since 2000 from \$42.1 billion, to \$23.9 billion in 2019. The decrease in smoking and cigarette sales can be attributed to years of anti-tobacco messaging and information presented on cigarette packaging. Furthermore, it has been found that the COVID-19 pandemic has also reduced smoking and vaping use among Canadians with the rising concern of lung health and longevity (Lao 2021).

More recently, in June 2022 the Government of Canada is moving ahead with the initiative to print health warnings on individual cigarettes, cigars, and cigarette tubes, along with the health warnings that are already printed on the packaging (Health Canada 2022). The government states that the goal of the new packaging is to ensure that health-related messages are extended to reach individuals who access cigarettes infrequently, possibly one at a time in social situations. The Government states that labelling the tipping paper of cigarettes and other tobacco products would make it “virtually impossible to avoid health warnings altogether”, and now target the infrequent smokers along with the individuals who regularly smoke. These proposed regulations would also update current health-related messages, extending messaging requirements to include a list of health hazards and negative health effects to be featured on tobacco products including stomach cancer, colorectal cancer, diabetes, peripheral vascular disease, and cervical cancer. If implemented, Canada would be the first country in the world to introduce such a requirement (Health Canada 2022).

Response of the Tobacco Industry

When these additions and changes were first proposed in 2018, Health Canada launched a public consultation seeking feedback on the reforms. Health Canada received a total of 10

submissions from the tobacco industry, which included large multinational tobacco corporations, a First Nations tobacco product manufacturer, representatives from the cigar and smokeless tobacco industries, and a tobacco industry-funded coalition (Canada 2019).

Overall, the responses were generally in opposition to the reforms under consideration.

Respondents indicated opposition for various reasons with some believing that there was a lack of strong evidence to justify their implementation, particularly for labelling directly on cigarettes and for requiring larger health warnings. There were also concerns regarding the cost of changing printing machinery, adjusting ink and other printing processes, as well as packaging modifications for the new labelling. Furthermore, some respondents argued that the level of harm varies by tobacco product, and that the labelling should be reflective of the harm continuum.

Additionally, submissions from the cigar industry argued that cigars are important to Canadian culture and that the industry should be protected (Canada 2019).

Regardless of the tobacco industry pushback, the TVPA has been a key component in advancing the government's strategy to protect the health of Canadians from tobacco-related death and disease. As alcohol poses a health threat to the same degree that tobacco does, it should be a priority for the government to address and implement these policies as soon as possible to protect Canadians from the consequences of alcohol misuse.

CRITERIA/ANALYSIS

Table 1: A list of the criteria evaluated during the analysis.

Cost	<i>What resources are required, monetary or otherwise? What are the costs and benefits generated by the implementation? (Morestin 2012)</i>
Acceptance	<i>Which stakeholders are being considered and what is their position regarding the policy's acceptability? (Morestin 2012)</i>
Effectiveness	<i>What are the known potential impacts on effectiveness of the option being considered? (Morestin 2012)</i>
Feasibility	<i>What are the necessary conditions for implementation? Are the needed resources available in order to implement the policy alternatives? (Morestin 2012)</i>

Table 2: Status Quo Against the Criteria

<p>Cost</p>	<p>When evaluating a policy recommendation, cost is one of the most important criteria to consider. The cost of a policy change or new policy altogether can oftentimes be the deciding factor for implementation.</p> <p>Altering alcohol labels to include health information, health warnings, and images is generally a cost-effective, sustainable policy option for the government to implement in a relatively quick timeframe (Canadian Centre on Substance Use and Addition 2022). As the labels are already being produced, the cost for additional writing and or images will be minimal. There may be a small cost to producers to alter the configuration of their labels, but it would be a one-time cost which again would be minimal.</p>
<p>Acceptance</p>	<p>When looking at the criteria of acceptance, it is important to consider the two most prominent stakeholders: Alcohol beverage producers and the Government of Canada.</p> <p>Producers of liquor products would most-likely not accept this policy proposal.</p> <p>The goal to decrease consumers' alcohol consumption will, as a by-product, decrease revenue for producers and distributors. The alcohol industry would most likely mirror the arguments made by the tobacco industry regarding health warnings as discussed above. Arguments could be made against the evidence of effectiveness in support the implementation of new labels, the cost of ink, printing machinery and label configuration processes. Some stakeholders may</p>

argue that this is unnecessary and will negatively impact the drinking culture in Canada.

In an article published by CBC, *The National* reached out to 3 different liquor bodies in Canada; Wine Growers Canada (WGC), Beer Canada and Spirits Canada, to inquire whether they believe they have a responsibility to inform consumers of the risk and link between alcohol and cancer (CBC News 2022). WGC stated that they are aware of the health risks that may be associated with alcohol consumption, and they recently launched the ‘The Right Amount initiative’, which was created "to provide Canadians with information and tools to help make informed decisions on alcohol consumption." The WGC website includes responsible drinking guidelines, a standard drink calculator, and harm reduction recommendations for at-risk groups including pregnant women and youth. WGC also added to *The National* that, "the right amount of alcohol for some is none."

Beer Canada stated, "the decision whether to drink, and if so, how much, is a personal one. Responsible, moderate consumption can be part of a balanced lifestyle for most adults of legal drinking age." They added that "it is common knowledge that over-consumption comes with health risks" and that, "for some people, even moderate consumption may be associated with health risks." (CBC News 2022).

As for Spirits Canada, they maintain the position that there are health benefits to drinking. In a statement they said, "moderate consumption of alcohol has long been recognized as contributing to a healthy lifestyle and research has consistently indicated beneficial effects for cardiovascular diseases, reducing the risk of stroke and some diseases associated with ageing." Furthermore, Spirits Canada added there are several policies in place to ensure consumers are aware of the risks of misusing alcohol including government-controlled liquor boards, legal drinking age requirements, as well as restrictions on where alcohol can be sold and the setting of minimum prices. Spirits Canada believes that "against this comprehensive background of control and management of alcohol, warning labels have not been shown to be useful in altering consumer behaviour or reducing the amount people drink." (CBC News 2022). Once again, this may beg the question of why labelling should be pursued if individuals or organizations in the policy space do not believe this to be an effective tool. The exploration of similar jurisdictions indicates that their current labelling regimes are not effective, and have not been designed with decreasing alcohol consumption as the primary consideration. The argument here is that just because labelling has not succeeded elsewhere, does not mean that, in a new and more targeted form, it might not be a viable option for Canada. Identifying an effective combination of messages and content for alcohol labels that decreases consumption will require policy making attention to all four options presented. As previously discussed, health warnings

have been effective on reducing tobacco consumption in the country, so it would be a mistake to neglect the opportunity to trial this with alcohol.

The Government of Canada should be accepting of this proposal as they already have the policies and processes in place from the regulation and control of tobacco products. This could be seamlessly transitioned to alcohol beverage products following the same framework. Additionally, the Government also already has the Food and Drug Regulation in place, with an established ‘Health Claims’ section including alcohol. Having the regulation already in place should make the Government more accepting of this policy recommendation as no new legislation needs to be created, just amended. Furthermore, as mentioned previously in this report, alcoholism costs Canada approximately \$15 billion a year, so it would be assumed that given this tremendous figure, the government would be motivated to lessen the cost alcohol misuse poses on society, and relieve the burden on an already strained healthcare system.

Effectiveness

When exploring policy alternatives, effectiveness is one of the most important criteria to consider, as effectiveness determines the impact and viability of the policy.

Determining the optimal combination of labelling options would be an effective policy solution, as labels that include health information will provide communication to the consumer at key points of contact: the point of purchase and the time of drinking. It can also relay the information while the container is in

sight or in hand (Hobin et al 2020a). Once again, it is imperative to find the right combination and tone of labelling to maximize the effectiveness of the proposed policy, utilizing them in conjunction with pre-existing de-consumption strategies discussed previously in this report. Rather, it is finding the best options within labelling to pursue, not just the pursuit of labels in general. Examples of effective labels will be discussed below when examining a Yukon-based study that researched the effect of implementing health warnings on their alcohol products. There are also psychological factors to consider that are key to understanding how enhanced labelling will be effective at reducing consumption or increasing alcohol health literacy. Firstly, there is the Elaboration Likelihood Model, which is a general theory of persuasion which explains how individuals process stimuli differently, and how these processes influence attitudes and behaviours. Following this model, it suggests that pictorial health warnings could increase attention and cognitive elaboration thinking about the harms of alcohol use, which should lead to persuasion and subsequently a behaviour change (Brewer et al 2019). Other models such as the Health Belief Model and the Theory of Planned Behaviour should also be considered when evaluating effectiveness. The Health belief model predicts health behaviours by focusing on the attitudes and beliefs of individuals, to guide health promotion strategies (Brewer et al 2019). The Theory of Planned Behaviour is a cognitive theory that proposes that an individual's decision to engage in a specific behaviour such as drinking, can be predicted by that individual's intention to engage in that behaviour. These behaviours are usually determined by three variables: personal attitudes,

subjective norms, and perceived behavioural control (Brewer et al 2019). Additionally, examination of the Extended Parallel Process Model, which is a fear appeal theory that illustrates how individuals react to fear-inducing messages, would suggest that pictorial warnings may change alcohol use behaviour by eliciting fear of alcohol misuse (Brewer et al 2019). Understanding and applying these models to this specific policy recommendation would again suggest that pictorial warnings could exert their effects by changing risk perceptions and attitude, and generate deeper engagement with the messages. Furthermore, to determine the effectiveness of this policy recommendation we can also look at the effectiveness of tobacco labelling as a comparator. It has been found that due to the health warnings on cigarette packaging, Canadian smokers report increased thinking about the health risks of smoking, quitting smoking, and reluctance to smoke (Hammond et al 2007). The literature suggests that much of the success of cigarette labelling is due to the design of the label itself. The WHO's Framework Convention for Tobacco Control states that warning labels "should be 50% or more of the principal display areas but shall be no less than 30% of the principal display areas" (World Health Organization 2003). The most effective cigarette labels include large fonts with rotating health warnings including full colour graphic negative images. It has been found that graphic warnings typically evoke an emotional response, increase memory and awareness of health risks, and reinforce motivations to quit smoking to a greater extent than text warnings (Hammond et al 2007). Canada has some of the most extensive cigarette packaging and research indicates a greater cognitive, behavioural and

sustained impact from Canadian packaging over US, UK and Australia, as their packaging has smaller warnings mostly on the sides of the box (Borland et al 2009).

Lastly, we can evaluate the effectiveness of this policy proposal by examining an experimental study carried out in the Yukon to test the real-world impact of alcohol health warning labels on consumer attention, message processing, and self-reported drinking (Hobin et al 2020b). The study compared two cities in the Yukon- Whitehorse, which applied health warnings on their alcoholic beverage products, and Yellowknife which continued its usual labelling practices. The labelling intervention that Whitehorse implemented included 3 health warnings; 1) that alcohol can cause Cancer specifically mentioning breast and colon cancer, 2) presenting Canada's Low-Drinking Guidelines, and 3) gives consumers advice on how many Canadian standard drinks are contained in different sizes and strengths of alcoholic beverages. The labels were large, full colour, and presented in both English and French. The study used 5 indicators to assess the effectiveness of the intervention; the individual noticing changes to the alcohol label, the individual reading the label closely, the individual thinking about the label, talking with others about the label, and self-reported decrease in alcohol consumption (Hobin et al 2020b).

The results from the study demonstrate a statistically significant increase across the intervention period in all five of the indicators of those in Whitehorse compared to Yellowknife. As per the results, the effects were seen immediately following introduction of the new labels, and continued over the study period.

The repeated exposure over time caused a deeper consumer engagement with the labels, and ultimately increased the impact of the labels on consumer drinking behaviour (Hobin et al 2020b). Examples of the labelling utilized in this study can be seen in in Figure 4, 5 and 6.



Label 1:
Cancer Warning



Label 2:
National Drinking Guidelines



Label 3:
Standard Drink Information
(example for 750ml wine)

Feasibility

Feasibility is another important factor to consider when evaluating a policy alternative. Here we examine if the resources needed to implement this policy alternative are available for implementation, and the ease at which it can be accomplished.

Examining the Yukon study once again tells us that this policy option is indeed feasible. A total of 200,000 labels were implemented in the short duration of this study. In a one-month period, they were able to apply 47,000 cancer warning labels and 53,000 national drinking guideline labels in wave 1 of the study (Hobin et al 2020b). While details of how long these labels took to create are not included in the study, barriers regarding labelling production were not included or appeared to be an issue. Labels for these products are already in production and

the addition of health warnings does not seem like an apparent issue for the label maker.

A possible feasibility issue that could arise is with imported alcohol. As each country is responsible for their own labelling requirements, it is not guaranteed that health warnings would be included on their packaging. In this case, a solution could be to retroactively label imported international products with sticker labels containing the chosen health information and warnings.

Furthermore, the Government of Canada already has a legal document pertaining to labelling of alcohol. The Food and Drug Regulations need not be scrapped or even revised of all alcohol content, only the small portion of alcohol labelling would need to be amended and added to. This is quite feasible and would not require extensive change or effort.

RECOMMENDATION

It is recommended that Canada implements health information on alcohol product labelling in addition to the existing policies and practices in place to reduce alcohol consumption. It is recommended that the Food and Drug Regulation is amended to include the requirements in Section B.01.600 ‘Health Claims’. It is recommended that the health information presented includes a combination of labelling options such as health warning statements, pictograms/images, nutrition facts, and general drinking guidelines/standard drink information. It is recommended that the most effective combination of labelling options is found to pursue, ensuring the use of accessible language and images that cover the majority of the packaging. It is recommended that the Food and Drug Regulation follows suit with the Tobacco and Vaping Products Act, implementing an array of health claims that are approved by Health Canada. While labelling is not a panacea of alcohol misuse, it need not be disregarded as a viable policy option. Rather, health information options within labelling need to be explored to identify the most appropriate and effective combination of labelling. This is an opportunity to use alcohol labels as public education in Canada to support a more informed consumer, and possibly decrease alcohol use.

CONCLUSION

Excessive alcohol use can cause an array of adverse health consequences and is a public health concern that needs to be addressed promptly. Alcohol plays a large role in both Canadian culture and the economy, and various policies and attitudes surrounding alcohol can be documented throughout our history. As this report explored, similar jurisdictions have the same if not lesser policies regarding alcohol labelling, creating the perfect opportunity for Canada to become a leader in progressive alcohol labelling. Additionally, the research has shown that in

regard to a similar psycho-active substance like tobacco, health warnings on the packaging are an effective tool to decrease tobacco use and deter the individual from smoking. Alcohol labelling that includes a combination of options such as health warning statements, pictograms/images, nutrition facts, and general drinking guidelines/standard drink information is an underutilized tool that is a low-cost, accessible upstream approach that provides consumers with information and education on the harms of alcohol consumption. Through deploying and testing a range of health information options within labelling, we can establish the most effective combination for a broad range of stakeholders and target populations. This would be an effective addition to Canada's existing policies to disseminate information, educate and inform the consumer on the risks associated with alcohol use, with the goal of decreasing alcohol consumption. It is the responsibility of the Federal Government to protect Canadians and ensure the health of all citizens

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